



PATENT ABSTRACTS OF JAPAN

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C02F 1/42(21) Application number: 08035978
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(72) Inventor: FUJII MASATAKA(54) OPERATION METHOD FOR ION EXCHANGE
WATER TREATMENT DEVICE FOR FUEL
BATTERY

(57) Abstract:

PROBLEM TO BE SOLVED: To provide an operation method for an ion exchange water treatment device for a fuel cell by which supply water can be maintained at low electric conductivity, and simultaneously silica concentration can be also maintained at low concentration.

SOLUTION: Service water is added to condensation 5W condensed and obtained by a condensation condenser 5 so as to form mixed water 8 which is stored in an auxiliary water tank 12, the mixed water 8 is ion exchange treated so as to form supply water 19 having low electric conductivity, and the water 19 is supplied to the cooling water circulation unit 10 of a fuel cell. Ion exchange treatment is conducted by ion exchange resin cylinders 27 which is plurally divided and arranged in series mutually, the electric conductivity of the treated water is observed on the entrance side of a last stage ion exchange resin cylinder 27D by a conductivity sensor 28. When the electric conductivity exceeds a predetermined fixed level, it is judged that the silica concentration in the treated water flowing in the

last stage ion exchange resin cylinder 27D becomes high, plural ion exchange resin cylinders 27A, 27B, 27C positioning on the upstream side of the last ion exchange resin cylinder 27D are renewed.

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